

**From:** Reimer, Mathew <Mathew.Reimer@milwaukee.gov>  
**Sent:** Friday, May 22, 2015 1:36 PM  
**To:** Hnat, John J - DNR  
**Subject:** FW: BRRS Activity 02-41-562317  
**Attachments:** 13385\_Phase II Locations\_2014.2.18.pdf; 13385\_Soil Data Table.pdf; 13385\_Groundwater Data Table.pdf

Here is the info you requested.

Site  
soil  
GW

**From:** Reimer, Mathew  
**Sent:** Thursday, December 11, 2014 3:02 PM  
**To:** 'john.hnat@wisconsin.gov'  
**Subject:** BRRS Activity 02-41-562317

John,

The property located at 5750 W. Fond du Lac Avenue (BRRS Activity 02-41-562317) is a former dry cleaner and is several years tax-delinquent; the owner owes approximately \$70,000 in back taxes. We were able to access the site earlier this year through a special inspection warrant and perform an initial environmental assessment on the property. Petroleum and CVOC soil impacts were identified at two locations and CVOC groundwater impacts were noted in a temporary well at an apparent downgradient location. The CVOC concentrations in soil and groundwater are quite high. The area in the apparent downgradient direction from the former dry cleaner is residential. My concern is the potential for vapor intrusion into the nearby homes.

The RP will not likely take any action to assess or cleanup the site and the Redevelopment Authority does not want to assume responsibility for this site at this time. Do you have any thoughts or possible resources we could use to ensure the safety of nearby residents?

I have attached a figure and soil and groundwater tables for your reference.

Thanks,

Mat

Mathew Reimer  
 Senior Environmental Project Coordinator  
 Redevelopment Authority of the City of Milwaukee  
 414-286-5693 (phone)  
 414-286-5778 (fax)  
[mathew.reimer@milwaukee.gov](mailto:mathew.reimer@milwaukee.gov)

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Table 2  
Soil Analytical Table  
5750 W. Fond du Lac Avenue, Milwaukee, Wisconsin 53216  
Sigma Project No. 13385

Soil Sample Location:	SB-01	SB-01	SB-02	SB-02	SB-03	SB-03	SB-04	SB-04	SB-05	SB-05	Groundwater Pathway	Non-Industrial Direct Contact	
Sample Depth (feet bgs):	2-4	14-16	2-4	14-16	4-6	14-16	2-4	14-16	6-8	14-16	RCL <sup>4</sup>	RCL <sup>4</sup>	
Sample Collection Date:	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14	2/18/14			
Depth to Groundwater (feet bgs):	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Unsaturated/Smear Zone (U) or Saturated (S):	U	U	U	U	U	U	U	U	U	U			
Organic Vapor Monitor	0	0.2	0	0	88.5	0	0	0	41	0	NS	NS	
<b>PVOCs &amp; Detected VOCs</b>													
Benzene	µg/kg	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	<9.2	5.1	1,490	
Bromobenzene	µg/kg	<13	<13	<13	<13	<13	<13	<13	<13	<13	NS	354,000	
Bromochloromethane	µg/kg	<27	<27	<27	<27	<27	<27	<27	<27	<27	0.3	390	
Bromofluoromethane	µg/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	2.3	61,600	
tert-Butylbenzene	µg/kg	<20	<20	<20	<20	<20	<20	<20	<20	<20	NS	183,000	
sec-Butylbenzene	µg/kg	<41	<41	<41	<41	117.7	<41	<41	<41	<41	NS	145,000	
n-Butylbenzene	µg/kg	<26	<26	<26	<26	520	<26	<26	<26	<26	NS	108,000	
Carbon tetrachloride	µg/kg	<25	<25	<25	<25	<25	<25	<25	<25	<25	3.9	854	
Chlorobenzene	µg/kg	<16	<16	<16	<16	<16	<16	<16	<16	<16	NS	392,000	
Chloroethane	µg/kg	<42	<42	<42	<42	<42	<42	<42	<42	<42	226.6	NS	
Chloroform	µg/kg	<49	<49	<49	<49	<49	<49	<49	<49	<49	3.3	423	
Chloromethane	µg/kg	<181	<181	<181	<181	<181	<181	<181	<181	<181	15.5	171,000	
2-Chlorotoluene	µg/kg	<16	<16	<16	<16	<16	<16	<16	<16	<16	NS	507,000	
1-Chlorotoluene	µg/kg	<14	<14	<14	<14	<14	<14	<14	<14	<14	NS	253,000	
1,2-Dibromo-3-chloropropane	µg/kg	<48	<48	<48	<48	<48	<48	<48	<48	<48	0.2	8	
Dibromochloromethane	µg/kg	<14	<14	<14	<14	<14	<14	<14	<14	<14	32	933	
1,4-Dichlorobenzene	µg/kg	<33	<33	<33	<33	<33	<33	<33	<33	<33	44	3,480	
1,3-Dichlorobenzene	µg/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	1,152.2	297,000	
1,2-Dichlorobenzene	µg/kg	<38	<38	<38	<38	<38	<38	<38	<38	<38	1,168	376,000	
Dichlorodifluoromethane	µg/kg	<57	<57	<57	<57	<57	<57	<57	<57	<57	3,082.5	135,000	
1,2-Dichloroethane	µg/kg	<36	<36	<36	<36	<36	<36	<36	<36	<36	2.8	608	
1,1-Dichloroethane	µg/kg	<19	<19	<19	<19	<19	<19	<19	<19	<19	483.6	4,720	
1,1,1-Dichloroethane	µg/kg	<21	<21	<21	<21	<21	<21	<21	<21	<21	47	342,000	
cis-1,2-Dichloroethane	µg/kg	<24	<24	<24	<24	<24	<24	<24	<24	<24	41.2	156,000	
trans-1,2-Dichloroethane	µg/kg	<29	<29	<29	<29	<29	<29	<29	<29	<29	30.3 J	58.8	
1,2-Dichloropropane	µg/kg	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	<9.5	3.3	1,330	
2,2-Dichloropropane	µg/kg	<46	<46	<46	<46	<46	<46	<46	<46	<46	NS	NS	
1,3-Dichloropropane	µg/kg	<21	<21	<21	<21	<21	<21	<21	<21	<21	NS	1,490,000	
Dihydroxy Ether	µg/kg	<11	<11	<11	<11	<11	<11	<11	<11	<11	NS	2,260,000	
DiB (1,2-Dibromomethane)	µg/kg	<20	<20	<20	<20	<20	<20	<20	<20	<20	0.0282	47	
Ethylbenzene	µg/kg	<10	<10	<10	<10	289	<10	<10	<10	<10	1,570	7,470	
Hexachlorobutadiene	µg/kg	<95	<95	<95	<95	<95	<95	<95	<95	<95	NS	6,230	
Isopropylbenzene	µg/kg	<25	<25	<25	<25	155	<25	<25	<25	<25	NS	NS	
p-Isopropyltoluene	µg/kg	<31	<31	<31	<31	112	<31	<31	<31	<31	NS	162,000	
Methylene chloride	µg/kg	<57	<57	<57	<57	<57	<57	<57	<57	<57	2.6	69,700	
Methyl-tert-butyl-ether	µg/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	27	59,400	
Naphthalene	µg/kg	<114	<114	<114	<114	2,140	<114	<114	<114	<114	658.7	5,150	
n-Propylbenzene	µg/kg	<24	<24	<24	<24	720	<24	<24	<24	<24	NS	264,000	
1,1,2,2-Tetrachloroethane	µg/kg	<12	<12	<12	<12	<12	<12	<12	<12	<12	0.2	783	
1,1,1,2-Tetrachloroethane	µg/kg	<23	<23	<23	<23	<23	<23	<23	<23	<23	53.3	2,590	
Tetrachloroethane (PCE)	µg/kg	<49	<49	<49	<49	<49	<49	<49	<49	<49	27,200	4.5	
Toluene	µg/kg	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,107.2	818,000	
1,2,4-Trichlorobenzene	µg/kg	<79	<79	<79	<79	<79	<79	<79	<79	<79	439	23,100	
1,2,3-Trichlorobenzene	µg/kg	<129	<129	<129	<129	<129	<129	<129	<129	<129	NS	48,900	
1,1,1-Trichloroethane	µg/kg	<38	<38	<38	<38	<38	<38	<38	<38	<38	140.2	640,000	
1,1,2-Trichloroethane	µg/kg	<23	<23	<23	<23	<23	<23	<23	<23	<23	3.2	1,480	
Trichloroethane (TCE)	µg/kg	<28	<28	<28	<28	<28	<28	<28	<28	<28	1,110	3.6	
Trichlorofluoromethane	µg/kg	<86	<86	<86	<86	<86	<86	<86	<86	<86	NS	1,120,000	
1,2,4-Trimethylbenzene	µg/kg	<26	<26	<26	<26	9,000	<26	<26	<26	<26	1,379.3	69,800	
1,3,5-Trimethylbenzene	µg/kg	<26	<26	<26	<26	<26	<26	<26	<26	<26	NS	182,000	
Vinyl Chloride	µg/kg	<21	<21	<21	<21	<21	<21	<21	<21	<21	74	0.1	
Xylenes (total)	µg/kg	<99	<99	<99	<99	870	<99	<99	<99	<99	3,940	258,000	
<b>PAHs</b>													
Acenaphthene	µg/kg	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	NS	3,440,000	
Acenaphthylene	µg/kg	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	NS	NS	
Anthracene	µg/kg	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	196,744.2	17,000,000	
Benzo(a)anthracene	µg/kg	<18.4	<18.4	<18.4	<18.4	<18.4	<18.4	<18.4	<18.4	<18.4	NS	148	
Benzo(a)pyrene	µg/kg	<19	<19	<19	<19	<19	<19	<19	<19	<19	470	15	
Benzo(b)fluoranthene	µg/kg	<18	<18	<18	<18	<18	<18	<18	<18	<18	480	148	
Benzo(g)hoperylene	µg/kg	<23	<23	<23	<23	<23	<23	<23	<23	<23	NS	NS	
Benzo(k)fluoranthene	µg/kg	<20.6	<20.6	<20.6	<20.6	<20.6	<20.6	<20.6	<20.6	<20.6	NS	1,480	
Chrysene	µg/kg	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	<18.5	145.1	14,800	
Dibenzo(a,h)anthracene	µg/kg	<22.4	<22.4	<22.4	<22.4	<22.4	<22.4	<22.4	<22.4	<22.4	NS	15	
Fluoranthene	µg/kg	<18.1	<18.1	<18.1	<18.1	<18.1	<18.1	<18.1	<18.1	<18.1	88,817.9	2,290,000	
Fluorene	µg/kg	<20	<20	<20	<20	<20	<20	<20	<20	<20	14,814.8	2,290,000	
Indeno(1,2,3-cd)pyrene	µg/kg	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	<24.4	NS	148	
1-Methylnaphthalene	µg/kg	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	<19.5	NS	15,600	
2-Methylnaphthalene	µg/kg	<20.4	<20.4	<20.4	<20.4	<20.4	<20.4	<20.4	<20.4	<20.4	NS	229,000	
Naphthalene	µg/kg	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	<21.1	658.7	5,150	
Phenanthrene	µg/kg	<24.7	<24.7	<24.7	<24.7	<24.7	<24.7	<24.7	<24.7	<24.7	NS	NS	
Pyrene	µg/kg	<20	<20	<20	<20	<20	<20	<20	<20	<20	54,472.5	1,720,000	
<b>RCRA Metals</b>													
Arsenic	mg/kg	<0.72	<0.72	3.03	<0.72	<0.72	<0.72	2.85	<0.72	<0.72	<0.72	0.584	0.39
Barium	mg/kg	49.2	58.0	139	46.0	55.5	56.9	106	58.1	44.5	58.6	164.8	15,300
Cadmium	mg/kg	0.14 J	<0.08	<0.08	<0.08	0.14 J	<0.08	0.23 J	<0.08	<0.08	<0.08	0.752	70.2
Chromium	mg/kg	16.1	16	34.6	13.9	17.6	14.2	21.9	16.0	12.5	19.2	360,000	NS
Lead	mg/kg	7.17	4.7	11.2	5.66	7.03	4.95	21.0	5.05	8.42	5.05	27	490
Mercury	mg/kg	0.023	0.015	0.081	0.013	0.014	0.013	0.134	0.014	0.014	0.015	0.208	3.13
Selenium	mg/kg	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7	0.52	391
Silver	mg/kg	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	<0.34	0.8497	391	
Cumulative DC RCL Exceeded (Y/N)?													
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Notes:  
 1. Unsaturated/smear zone versus saturated soil conditions based on: (1) measured water levels in adjacent/nearby monitoring wells, (2) soil moisture conditions recorded on soil boring logs, and/or (3) soil moisture contents reported on laboratory analytical reports.  
 2. Analytical units: µg/kg = micrograms per kilogram (equivalent to parts per billion, ppb); mg/kg =

Table 1  
Groundwater Analytical Table  
5750 W. Fond du Lac Avenue, Milwaukee, Wisconsin 53216  
Sigma Project No. 13385

Well Location:	TW-01	TW-02	DUP (TW-01)	NR 140 ES	NR 140 PAL
Date:	2/24/14	2/24/14	2/24/14		
Water Elevation* (feet MSL):	NA	NA	NA		
<b>PVOCs &amp; Detected VOCs</b>					
Benzene	µg/L	<0.24	<0.24	<0.24	5 0.5
Ethylbenzene	µg/L	2.53	<0.55	1.32 J	700 140
Methyl-tert-butyl-ether	µg/L	<0.23	<0.23	<0.23	60 12
Toluene	µg/L	<0.69	<0.69	<0.69	800 160
1,2,4-Trimethylbenzene	µg/L	13.1	<2.2	10.1	NS NS
1,3,5-Trimethylbenzene	µg/L	<1.4	<1.4	<1.4	NS NS
Total Trimethylbenzene	µg/L	13.1	<3.6	10.1	480 96
Xylenes, Total	µg/L	6.0	<1.32	3.06	2,000 400
Bromobenzene	µg/L	<0.32	<0.32	<0.32	NS NS
Bromodichloromethane	µg/L	<0.37	<0.37	<0.37	0.6 0.06
Bromoform	µg/L	<0.35	<0.35	<0.35	4.4 0.44
tert-Butylbenzene	µg/L	<0.36	<0.36	<0.36	NS NS
sec-Butylbenzene	µg/L	<0.33	<0.33	<0.33	NS NS
n-Butylbenzene	µg/L	<0.35	<0.35	<0.35	NS NS
Carbon Tetrachloride	µg/L	<0.33	<0.33	<0.33	5 0.5
Chlorobenzene	µg/L	<0.24	<0.24	<0.24	NS NS
Chloroethane	µg/L	<0.63	<0.63	<0.63	400 80
Chloroform	µg/L	<0.28	0.29 J	<0.28	6 0.6
Chloromethane	µg/L	<0.81	<0.81	<0.81	30 3
2-Chlorotoluene	µg/L	<0.21	<0.21	<0.21	NS NS
4-Chlorotoluene	µg/L	<0.21	<0.21	<0.21	NS NS
1,2-Dibromo-3-Chloropropane	µg/L	<0.88	<0.88	<0.88	0.2 0.02
Dibromochloromethane	µg/L	<0.22	<0.22	<0.22	60 6
1,4-Dichlorobenzene	µg/L	<0.3	<0.3	<0.3	75 15
1,3-Dichlorobenzene	µg/L	<0.28	<0.28	<0.28	600 120
1,2-Dichlorobenzene	µg/L	<0.36	<0.36	<0.36	600 60
Dichlorodifluoromethane	µg/L	<0.44	<0.44	<0.44	1,000 200
1,2-Dichloroethane	µg/L	1.0 J	<0.41	0.87 J	5 0.5
1,1-Dichloroethane	µg/L	<0.3	<0.3	<0.3	850 85
1,1-Dichloroethene	µg/L	<0.4	1.27 J	<0.4	7 0.7
cis-1,2-Dichloroethene	µg/L	<0.38	<b>540</b>	<0.38	70 7
trans-1,2-Dichloroethene	µg/L	<0.35	9.0	<0.35	100 20
1,2-Dichloropropane	µg/L	<0.32	<0.32	<0.32	5 0.5
2,2-Dichloropropane	µg/L	<0.36	<0.36	<0.36	NS NS
1,3-Dichloropropane	µg/L	<0.33	<0.33	<0.33	NS NS
Di-isopropyl ether	µg/L	<0.23	<0.23	<0.23	NS NS
EDB (1,2-Dibromoethane)	µg/L	<0.44	<0.44	<0.44	0.05 0.005
Hexachlorobutadiene	µg/L	<1.5	<1.5	<1.5	NS NS
Isopropylbenzene	µg/L	0.98	<0.3	0.52 J	NS NS
p-Isopropyltoluene	µg/L	<0.31	<0.31	<0.31	NS NS
Methylene Chloride	µg/L	<0.5	<0.5	<0.5	5 0.5
Naphthalene	µg/L	<1.7	<1.7	<1.7	100 10
n-Propylbenzene	µg/L	2.12	<0.25	1.1	NS NS
1,1,2,2-Tetrachloroethane	µg/L	<0.45	<0.45	<0.45	0.2 0.02
1,1,1,2-Tetrachloroethane	µg/L	<0.33	<0.33	<0.33	70 7
Tetrachloroethene (PCE)	µg/L	<0.33	<b>3200</b>	<0.33	5 0.5
1,2,4-Trichlorobenzene	µg/L	<0.98	<0.98	<0.98	70 14
1,2,3-Trichlorobenzene	µg/L	<1.8	<1.8	<1.8	NS NS
1,1,1-Trichloroethane	µg/L	<0.33	1.01	<0.33	200 40
1,1,2-Trichloroethane	µg/L	<0.34	1.03 J	<0.34	5 0.5
Trichloroethene (TCE)	µg/L	<0.33	<b>83</b>	<0.33	5 0.5
Trichlorofluoromethane	µg/L	<0.71	<0.71	<0.71	3,490 698
Vinyl Chloride	µg/L	<0.18	<b>6.8</b>	<0.18	0.2 0.02
<b>Dissolved Metals</b>					
Arsenic	µg/L	<0.6	2.0	NA	10 1
Barium	µg/L	534	80.2	NA	2,000 400
Cadmium	µg/L	<5	<0.5	NA	5 0.5
Chromium	µg/L	<2.6	<2.6	NA	100 10
Lead	µg/L	<0.7	2.1 J	NA	15 1.5
Mercury	µg/L	<0.04	<0.04	NA	2 0.2
Selenium	µg/L	1.5 J	1.0 J	NA	50 10
Silver	µg/L	<103	<10.3	NA	50 10

Notes:

1. NR 140 ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
2. NR 140 PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
3. NS = no standard
4. µg/L = micrograms per liter (equivalent to parts per billion, ppb)
5. NA = Not Analyzed
6. Laboratory flags: "J" = Analyte detected between Limit of Detection and Limit of Quantitation. Enter other flags as necessary
7. Trip blank results: 1/1/13: All VOCs reported below laboratory detection limits.
8. Equipment blank results: 1/1/13: All VOCs reported below laboratory detection limits.
9. Exceedances: **BOLD** = Concentration exceeds NR 140 ES  
*ITALICS* = Concentration exceeds NR 140 PAL
10. Special notes: \* = monitoring well screen submerged below water table

\*\* = not a statistically valid PAL exceedance per NR 140.14(3)(c)

Hot spot = SB-05

Soil  
 PCE 27,200  
 TCE 1100  
 CIS 1-2 DCE 2880

GW  
 PCE 3200  
 TCE 83  
 VC 6.8  
 CIS 540



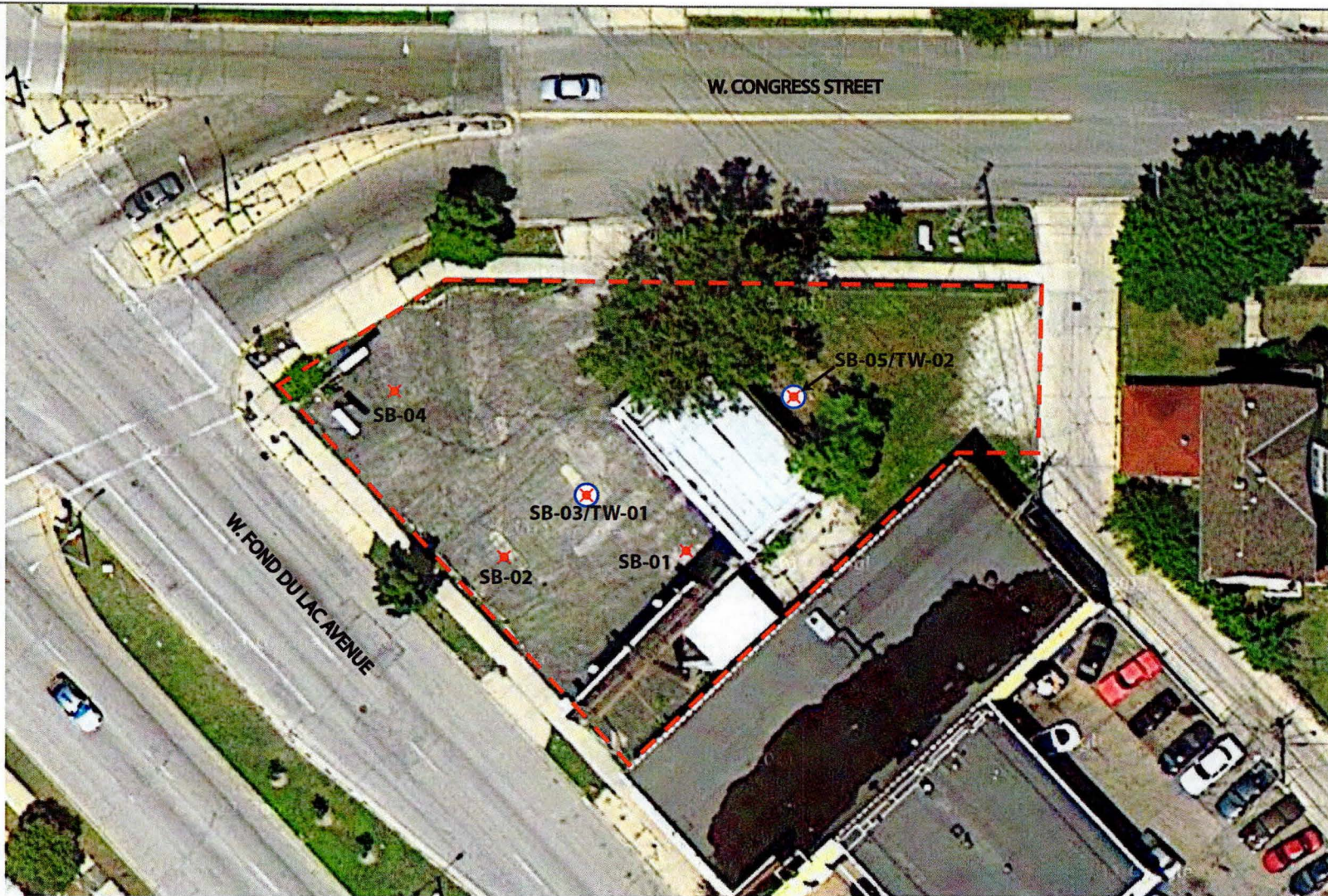
- Public Alleyway

LEGEND	
✕ Appx. Soil Boring Location	○ Temporary Well
- - - Property boundary	



PHASE II SITE INVESTIGATION  
 02-18-2014  
 5750 W. FOND DU LAC AVENUE  
 MILWAUKEE, WISCONSIN 53216

FIGURE  
 1



LEGEND	
✕ Appx. Soil Boring Location	○ Temporary Well
- - - Property boundary	




**THE SIGMA GROUP**  
 Single Source. Sound Solutions.

**PHASE II SITE INVESTIGATION**  
 02-18-2014  
 5750 W. FOND DU LAC AVENUE  
 MILWAUKEE, WISCONSIN 53216

FIGURE  
**1**